

REMARKS

The Final Office Action mailed December 26, 2007, has been reviewed and these remarks are responsive thereto. Claims 1-30 remain pending in this application and currently stand rejected. Claims 1, 20, and 21 have been amended. Claims 11, 12, and 27-30 have been cancelled without prejudice or disclaimer. No new matter is added by the amendments.

Interview Summary

A telephonic interview was held between the Examiner and the Applicant's attorney on February 12, 2008. The attorney explained the amendments. The Examiner stated that the amendments would require further search over the cited references and a Request for Continued Examination in order to be considered. The Examiner's accommodation of the interview is appreciated.

Claim Rejections Under 35 U.S.C. §112

The Office Action rejected claims 1, 20, 21, and 27 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the applicant regards as the invention.

In particular, claim 1 is rejected stating the limitation "wherein the grammar defines an appropriate input for the input field, and wherein the schema in markup language schema registry is associated with a corresponding grammar" is incomprehensive in intent and distinct in meaning. Applicant is unsure how to clarify further the first part of this element subject to rejection. A grammar, as defined and used throughout the Specification, is utilized to define an appropriate input or an acceptable string for an input field. The second part contained a typographical error, which has been corrected in the above listed amendments. If that error was the cause of the rejection, the rejection should be withdrawn.

Claims 20 and 21 have been amended to clarify which grammar is being referred to in the latter part of each claim. Thus, the rejection should be withdrawn for these claims as well. Claim 27 has been cancelled without prejudice or disclaimer. The rejection of this claim is moot.

Claim Rejections Under 35 U.S.C. §103

The Office Action rejected claims 1-3, 5, 8-13, 15-17, and 19 under 35 U.S.C. 103(a) as being unpatentable over Yamakita (US 5,956,681) in view of Szabo (US 6,868,525) and of Butler et al. (US 7,082,392), and in further view of Hailey (US 6,950,831). Applicant respectfully traverses the rejections.

Amended claim 1 recites a computer system for applying mode bias to an input field of an electronic document of an application that includes a mark-up language schema registry configured to receive a schema name based on a hierarchical analysis of a textual input to the input field from the application, locate a grammar comprising a regular expression or a statistical language model, the grammar having a language setting and a locale setting, and being associated with the schema name, and send the grammar to an input engine in communication with the registry. According to claim 1, the grammar defines an appropriate input for the input field and each mark-up language schema is associated with a grammar by referring to the grammar directly or mapping to the grammar. The claim has been amended to further clarify the term grammar as recited in now cancelled claims 11 and 12, and to correct a typographical error.

Yamakita discloses a communication environment using a mobile terminal, a speech recognition function as a user interface of the mobile terminal at a practical accuracy and cost and to enable generation/transmission of an E-mail or FAX document as formatted text data on the basis of the recognition result. (See *Yamakita* column 2, lines 18-23.) *Yamakita* also discloses a formatted text generation section that determines a field of the recognized speech text data output from a text speech recognition section using a format type data which is designated from a mobile terminal together with a text speech recognition/formatting start request command, and a format type field dictionary. (See *Yamakita* column 5, lines 34-40.) In addition, *Yamakita* discloses a packet transmission/reception section (FIG. 1) in a speech control host unit recognizes a value set in a "destination port number" field of a TCP header of a received TCP segment, thereby determining an application executed by the speech control host unit as a transfer destination of data stored in the "data" field of the TCP segment. (See *Yamakita* column 16, lines 22-28.)

Thus, as mentioned in the previous response, *Yamakita* fails to disclose most of the elements of Applicant's amended claim 1. For example, the table described in FIG. 10 of *Yamakita* is a processing terminal registration table with entries for transmission source IP

address, access time, etc. This is not similar to the mark-up language schema registry recited in claim 1. *Yamakita* further fails to disclose receiving a schema name based on a hierarchical analysis of a textual input to the input field from the application, locating a grammar with a language setting, a locale setting and associated with the schema name, where the grammar defines an appropriate input for the input field. *Yamakita* certainly does not teach or suggest each mark-up language schema being associated with a grammar by referring to the grammar directly or mapping to the grammar.

In contrast to amended claim 1, *Yamakita* merely recognizes keywords recited in different languages by a user, and does not utilize either a language setting or a locale setting. (See *Yamakita* column 35, lines 43-64.) Moreover, *Yamakita* fails to teach a grammar comprising a regular expression or a statistical language model and merely recognizes words as text data and is responsive to a keyword (See *Yamakita* column 5, lines 34-40.).

Szabo discloses an improved human user computer interface system providing a graphic representation of a hierarchy populated with naturally classified objects with distinct classification and a personal services infrastructure which unifies the visual environment through the use of stylized taxonomic trees and timelines ("maps"). (See *Szabo* Abstract, column 17, lines 41-44.) *Szabo* also discloses using a user hierarchal schema having documents for providing similar or related information classified together, wherein this similarity or relatedness is not defined intrinsically in the query. (See *Szabo* column 21, lines 38-45.)

Even though *Szabo* and *Yamakita* are directed to completely different subject matters and cannot be combined without the hindsight of the present application, if one were to combine the cited references they still fail to render claim 1 obvious.

The Office Action further relies on *Butler* to remedy the deficiencies of *Yamakita* and *Szabo*. *Butler* describes an interactive voice response system with a plurality of speech technology modules and dynamically determining which of the plurality of speech technology modules are to be used during interaction between the system and a user (See *Butler* Abstract, column 1, lines 8-12). However, *Butler*, individually or in combination with the other cited references, also fails to teach or suggest the above discussed features of amended claim 1.

The Office Action has added *Haley* to the three references to arrive at the present invention. The forced combination of four distinctly different references alone indicates that one skilled in the art would not easily arrive at the present invention. Moreover, *Haley*, while

describing a binding table and XML schema, does not cure the deficiencies of the other three references in rendering the elements of claim 1 obvious, as discussed above.

The above described features of claim 1 are patentably distinct from the combination of the four references and are not disclosed or hinted at by the cited references. Therefore, amended claim 1 is in condition for allowance. Notice to that effect is respectfully requested.

Claims 2-3, 5, 8-10, 15-17, and 19 depend from independent claim 1 with additional features. Therefore, claims 2-3, 5, 8-10, 15-17, and 19 are also allowable for at least the same reasons as discussed above for amended claim 1. Claims 11 and 12 have been cancelled without prejudice or disclaimer.

Claims 4, 6, and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Yamakita* in view of *Szabo*, in view of *Butler*, in view of *Haley* and in further view of *Fisher* (US 2001/0041328).

As discussed above, *Yamakita*, *Szabo*, *Butler*, and *Haley* fail to teach or suggest several features of amended independent claim 1. *Fisher* discloses a computer simulation process, apparatus, and multimedia game intended for simulated, foreign travel experiences and simulated, foreign language environments (See *Fisher* paragraph [0004]). *Fisher* discloses that the simulator produces a user-character dialogue simulation by digitizing video or transferring digital video content to a computer system, which is suitable for digital video editing and image editing (See *Fisher* paragraph [0036]). *Fisher* also discloses that the simulator produces a user-character dialogue simulation by segmenting the video according to content, which is based on semantic structures, grammar, gestures, and other features of communication (See *Fisher* paragraph [0036]). Thus, *Fisher* fails to remedy the above described deficiencies of the four cited references in making claim 1 obvious.

Claims 4, 6, and 7 depend from independent amended claim 1, and are therefore allowable for at least the same reasons discussed above for claim 1. Notice to that effect is respectfully requested.

Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Yamakita* in view of *Szabo*, in view of *Butler*, in view of *Haley*, and further in view of *De La Huerca* (US 6,434,567).

As discussed above, *Yamakita*, *Szabo*, *Butler*, and *Haley* fail to teach or suggest several features of amended independent claim 1. *De La Huerga* discloses a system including predefined address format fields and corresponding instantiation rule sets which can be used to quickly define address formats for use by an enterprise computing system. (See *De La Huerga* column 6, lines 45-49.) *De La Huerga* also discloses a system in which address formats can be specified once for all processing devices (e.g. databases, servers, applications, data collection devices, etc.). (See *De La Huerga* column 6, lines 49-52.) However, *De La Huerga* also fails to remedy the deficiencies of the four cited references in making claim 1 obvious. Claim 14 depends from claim 1 with additional features. Therefore, claim 14 is also allowable for at least the same reasons as discussed above for claim 1.

The Office Action rejected claim 18 under 35 U.S.C. § 103(a) as being unpatentable over *Yamakita*, *Szabo*, *Butler*, and *Haley*, and in further view of U.S. Patent No. 5,895,461 to De La Huerga (hereinafter *De La Huerga* '461). Applicant respectfully traverses this rejection as well.

As mentioned above, the combination of *Yamakita*, *Szabo*, *Butler*, and *Haley* fail to teach or suggest most limitations of claim 1. Accordingly, dependent Claim 18 is also allowable over the combination of *Yamakita*, *Szabo*, *Butler*, and *Haley* at least for the reasons described above regarding independent claim 1 and by virtue of its dependency upon independent claim.

De La Huerga '461 discloses a specialized word processor for accepting and recognizing keywords input by the creator of a data record and storing the record at a predetermined location which will be referenced by a hypertext link associated with the keywords. (See *De La Huerga* '461 column 6, lines 33-39.) *De La Huerga* '461 also discloses that the specialized word processor checks the format of data for the proper length and corrects characters input by a user. (See *De La Huerga* '461 column 6, lines 50-55.) Thus, *De La Huerga* '461 in combination with the other four references does not teach or suggest independent claim 1 or its dependent claim 18.

Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Yamakita*, in view of *Haley*. Applicant respectfully traverses the rejection.

Amended claim 20 recites a computer system for applying mode bias to an input field of an electronic document of an application that includes a mark-up language schema registry in

communication with the application and an input engine, where the registry is operable to point to code for dynamically generating a plurality of grammars comprising regular expressions or statistical language models, where the plurality of grammars are used to define an appropriate input for the input field, and each mark-up language schema in the registry is associated with a corresponding grammar by referring to the corresponding grammar directly or mapping to the corresponding grammar. According to claim 20, the system further includes an input engine in communication with the mark-up language schema registry, where the mark-up language schema registry receives a schema name from the application through a text service framework, locates an identifier of a grammar among the plurality of grammars associated with the schema name and sends the located identifier of the grammar to the input engine.

Thus, amended claim 20 includes elements similar to the features of claim 1 with additional limitations, which as described above is not made obvious by *Yamakita* in view of *Haley*. Therefore, amended claim 20 is also not taught or suggested by the combination of *Yamakita* and *Haley*, and is in condition for allowance. Notice to that effect is respectfully requested.

Claims 21, 22, 24, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Yamakita*, in view of *Haley*, and in further view of *Szabo*. Applicant respectfully traverses the rejection.

Amended claim 21 recites a computer-implemented method for applying mode bias to an input field of an electronic document of an application program module that includes, *inter alia*, determining a mode bias schema that is attached to the input field where the determination of a mode bias schema uses a ranked list of mode bias schemas and dynamically generating a plurality of grammars based on the input field and a mark-up language schema registry where the grammars define an appropriate input for the input field, and each of the grammars comprises a regular expression or a statistical language model, has a language setting and a locale setting, and is associated with the schema name. The method of claim 21 further includes determining a grammar from the generated grammars that is associated with the mode bias schema and sending the grammar associated with the mode bias schema to an input engine.

The actions of the method of amended claim 21 include similar features to the systems of amended claims 1 and 20. Therefore, amended claim 21 is also not rendered obvious by the

combination of *Yamakita*, *Haley*, and *Szabo*. Furthermore, claims 22, 24, and 25 depend from amended claim 21 with additional features. Thus, claims 21, 22, 24, and 25 are allowable for at least the reasons discussed above. Notice to that effect is respectfully requested.

Claims 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Yamakita* in view of *Szabo*, in view of *Haley*, and further in view of *De La Huerga '461*.

As mentioned above, the combination of *Yamakita*, *Szabo*, and *Haley* fail to teach or suggest all the limitations of claim 1 or claim 21. Accordingly, claim 23, which is dependent from claim 21, is also allowable over the combination of *Yamakita*, *Szabo*, and *Haley* at least for the reasons described above regarding independent claim 21 and by virtue of its dependency upon independent claim 21. *De La Huerga '461* fails to disclose any of the essential features of independent claim 21, individually or in combination with the other three references, and thereby dependent claim 23.

Claims 27-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Yamakita* and *Haley* in view of Bays et al. (US 6,519,603) in further view of *Szabo*. Claims 27-30 have been cancelled without prejudice or disclaimer. Therefore, the rejection is moot.

CONCLUSION

Applicant respectfully requests that this Amendment After Final be entered by the Examiner, placing the claims in condition for allowance. Applicant respectfully submits that the proposed amendments of the claims do not raise new issues or necessitate the undertaking of any additional search of the art by the Examiner, since all of the elements and their relationships claimed were either earlier claimed or inherent in the claims as examined. Therefore, this Amendment should allow for immediate action by the Examiner.

Finally, Applicant respectfully submits that the entry of the Amendment would place the application in better form for appeal, should the Examiner dispute the patentability of the pending claims.

In view of the foregoing amendments and remarks, Applicants respectfully submits that the present application is in condition for allowance. Reconsideration and reexamination of the application and allowance of the claims at an early date are hereby solicited. If the Examiner has any questions or comments concerning this matter, the Examiner is invited to contact the applicant's undersigned attorney at the number below.

Respectfully submitted,

MERCHANT & GOULD P.C.
P.O. Box 2903
Minneapolis, Minnesota 55402-0903
(612) 332-5300



Date: February 19, 2008

A handwritten signature in black ink, appearing to read "C. Turk".

Carl K. Turk
Reg. No. 59,675